

FIG. 1A

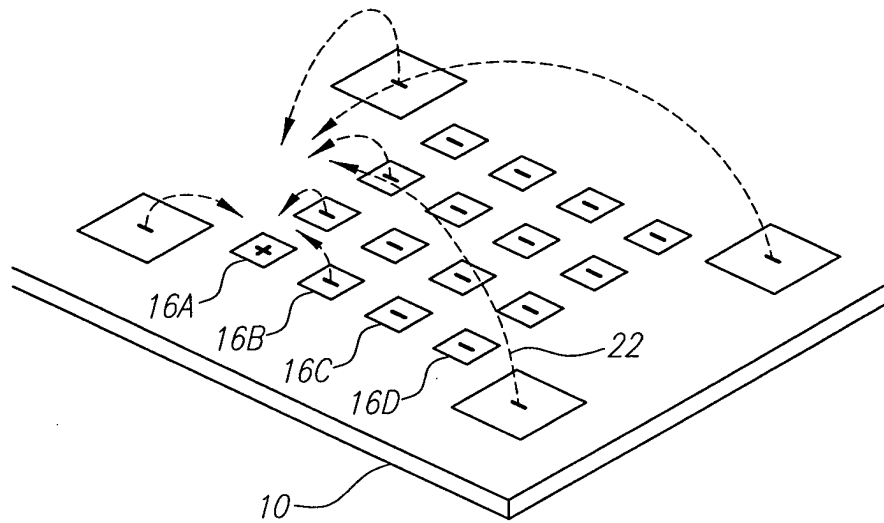
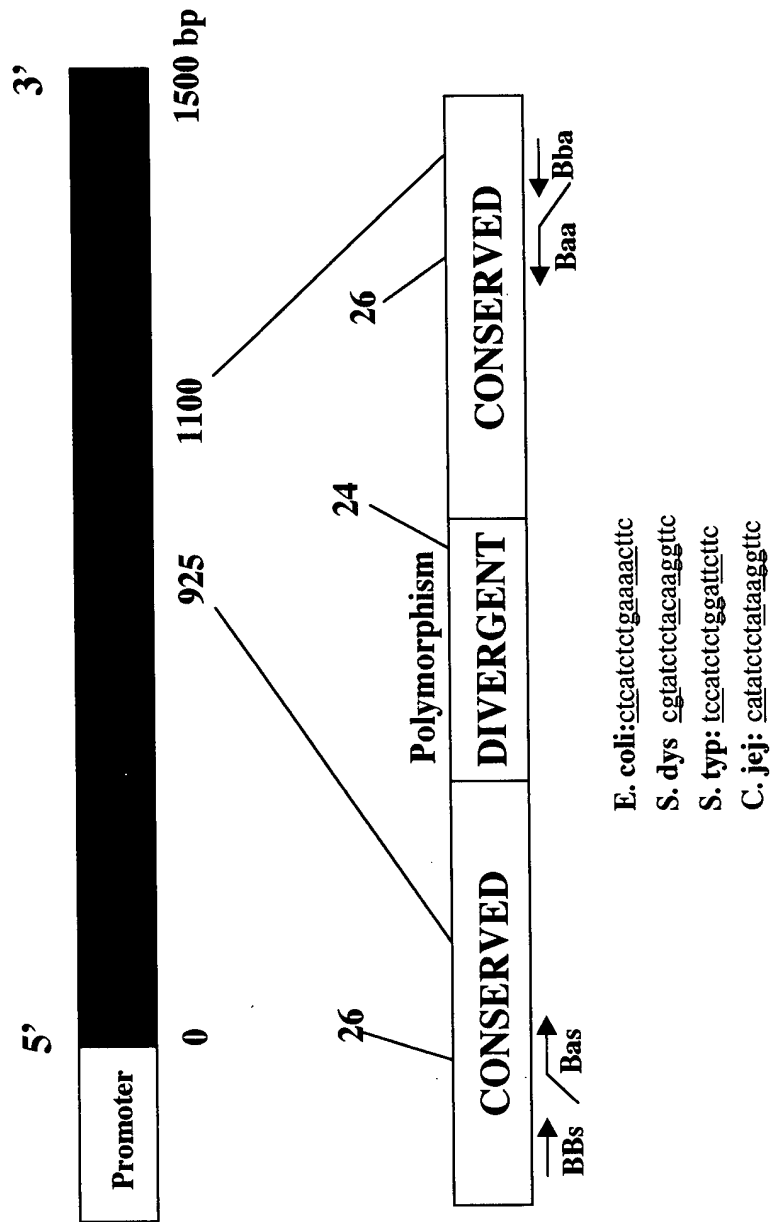


FIG. 1B

09865807.05201  
105250 20859860

T05250.20859860

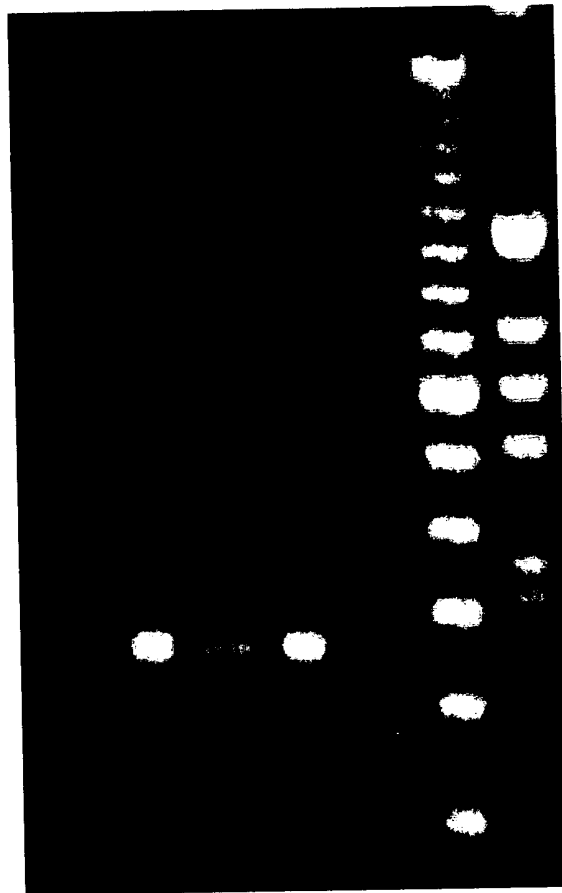
FIGURE 2A



3/34

## FIGURE 2B

Control  
E.coli 0157:H7  
Shigella  
Salmonella  
M1 M2



T05250" 20859860

105250" 0859860

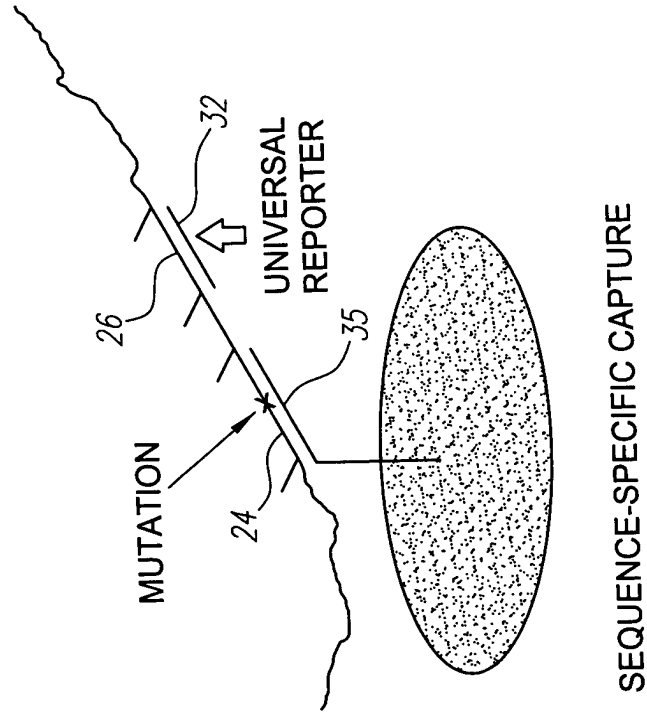


FIG. 2D

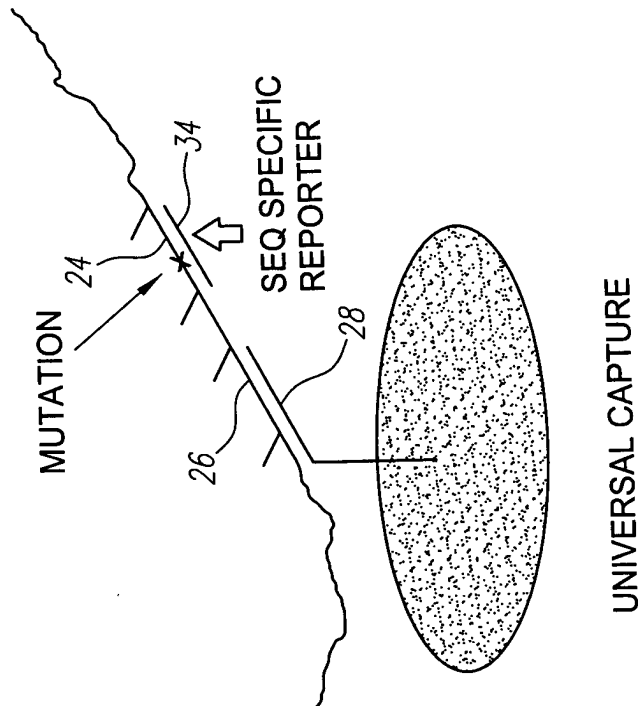


FIG. 2C

105250" 10859860

FIGURE 3A

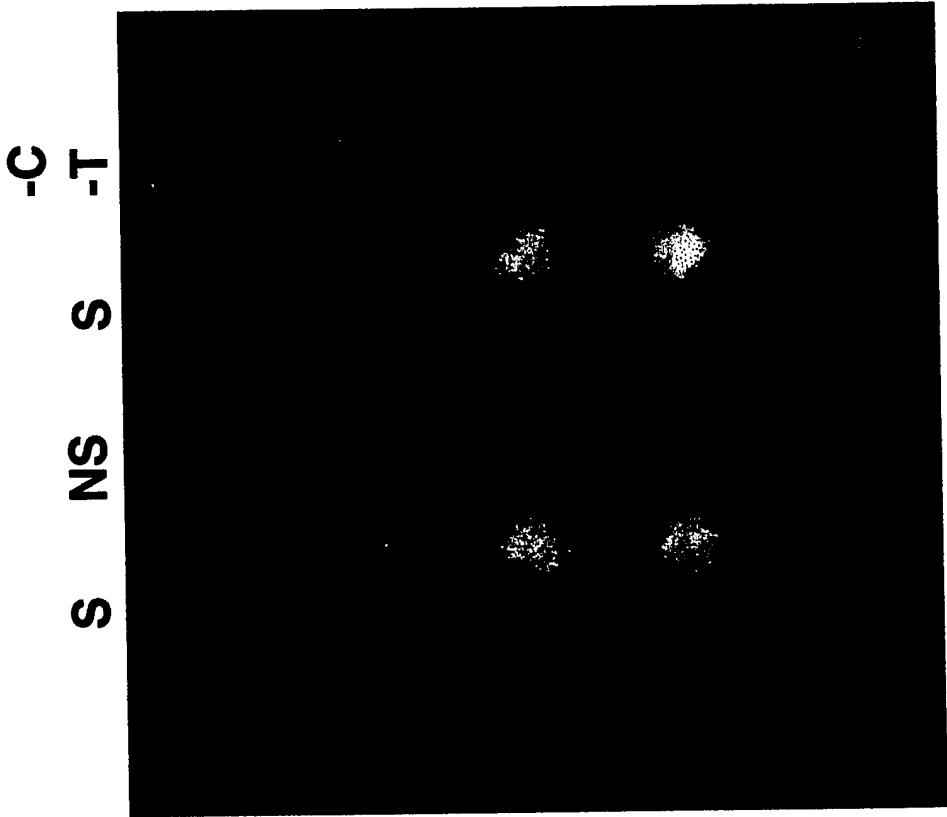
Campylobacter

Shigella

Salmonella

Salmonella

+C, -T



6/34

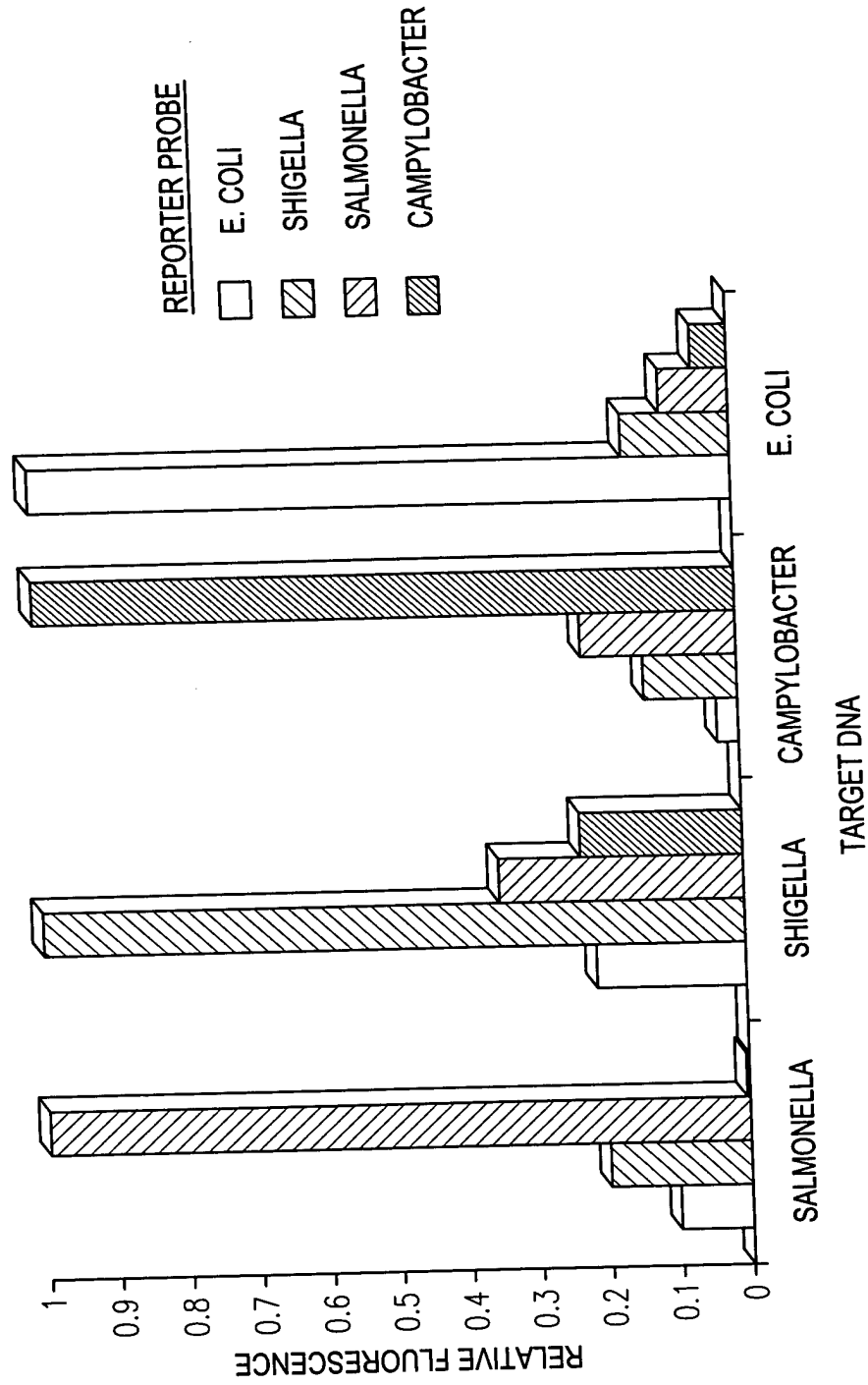


FIG. 3B

7/34

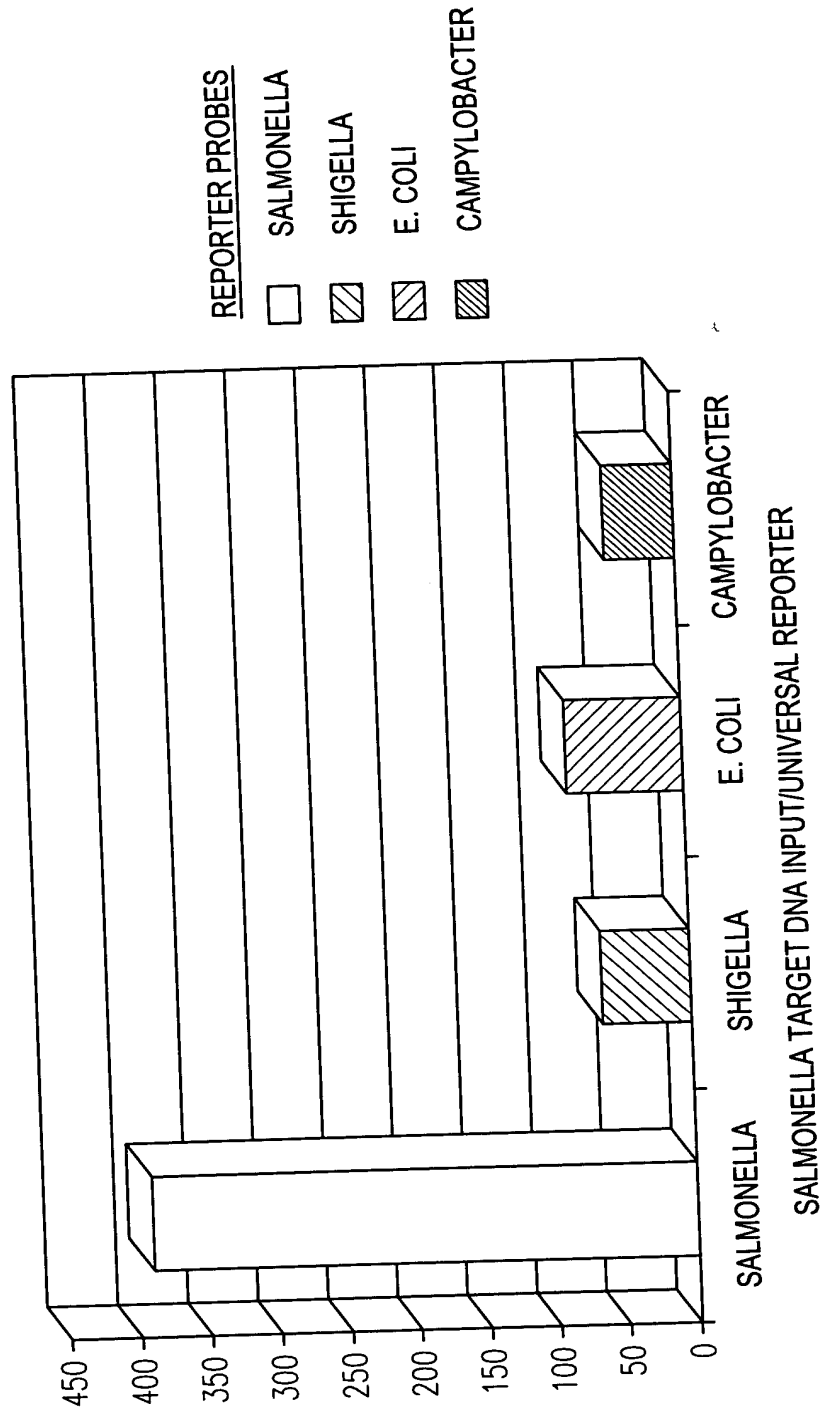


FIG. 3C

[illegible]



9/34

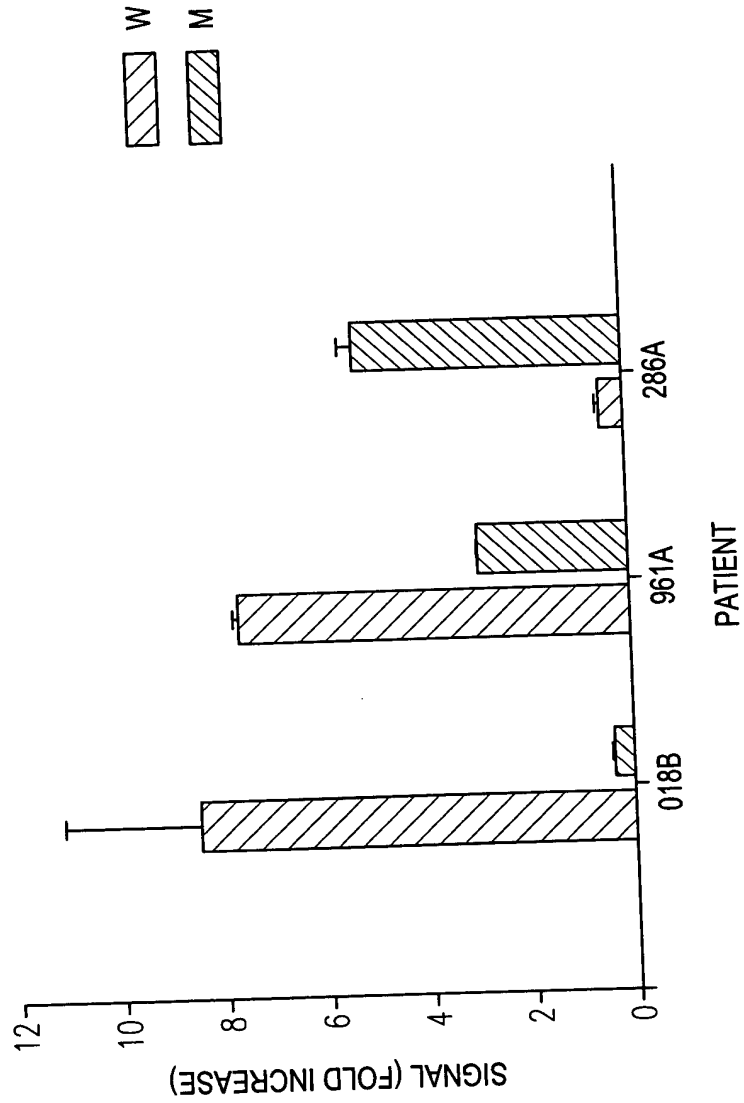
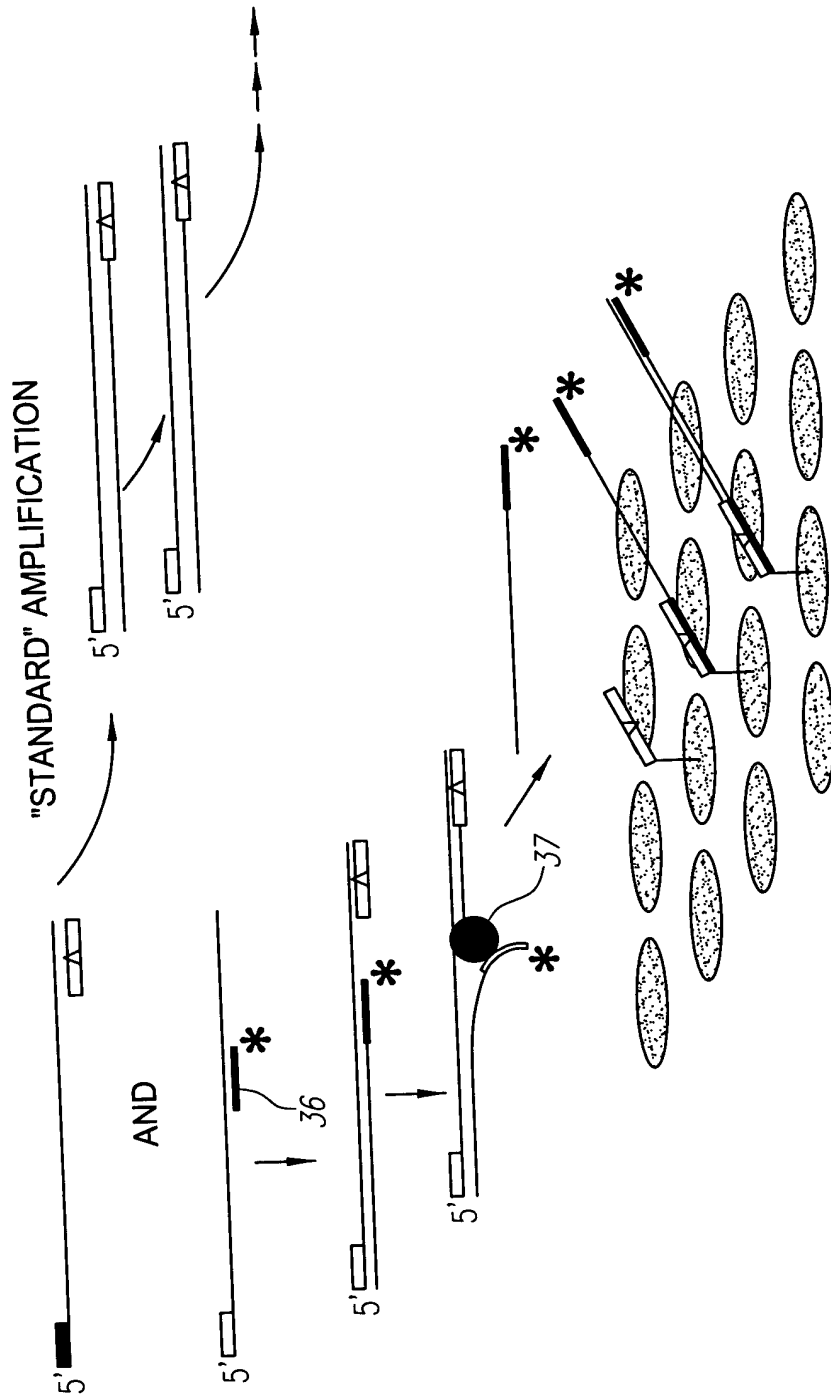


FIG. 4B

105250" 20859860

10/34



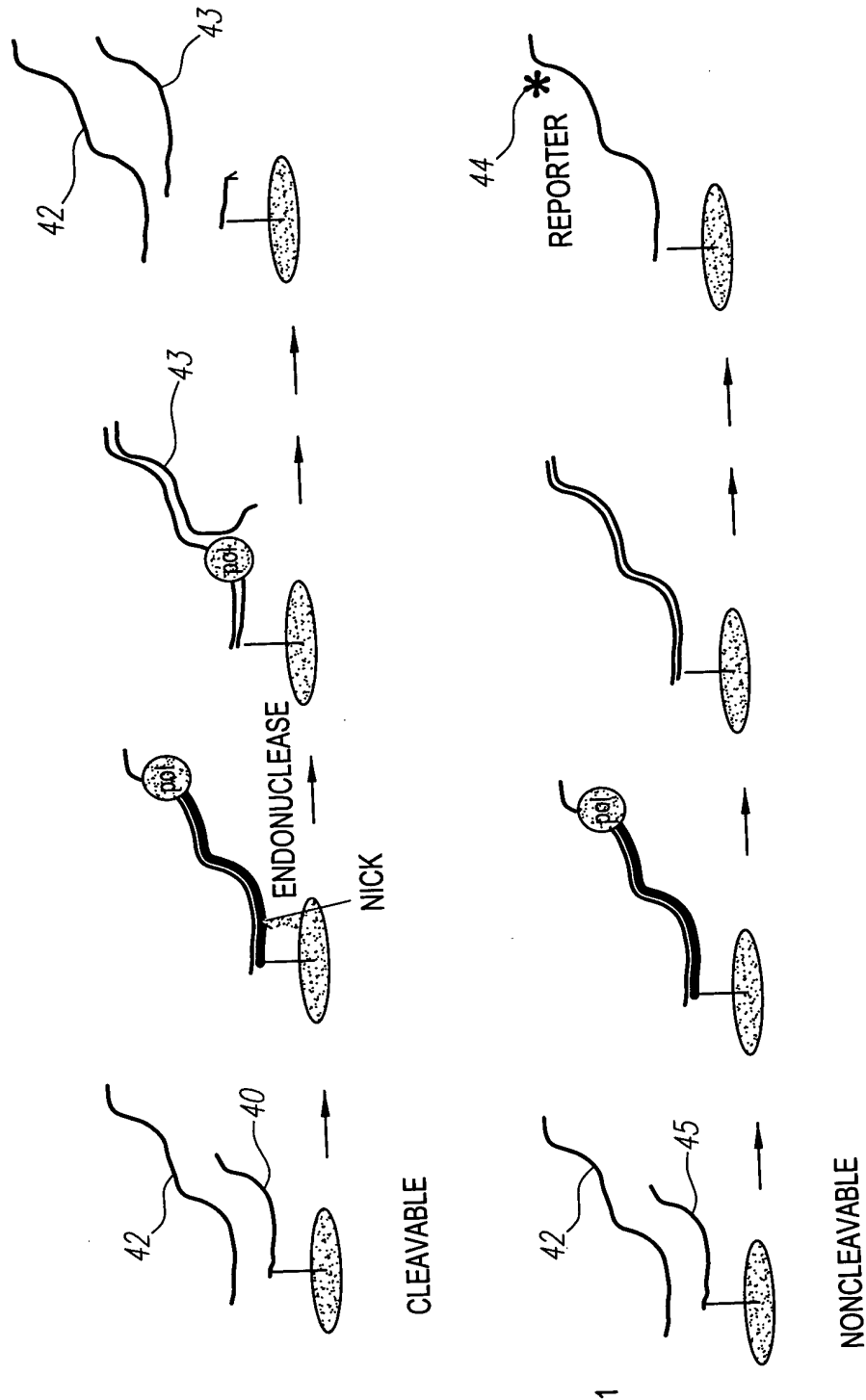
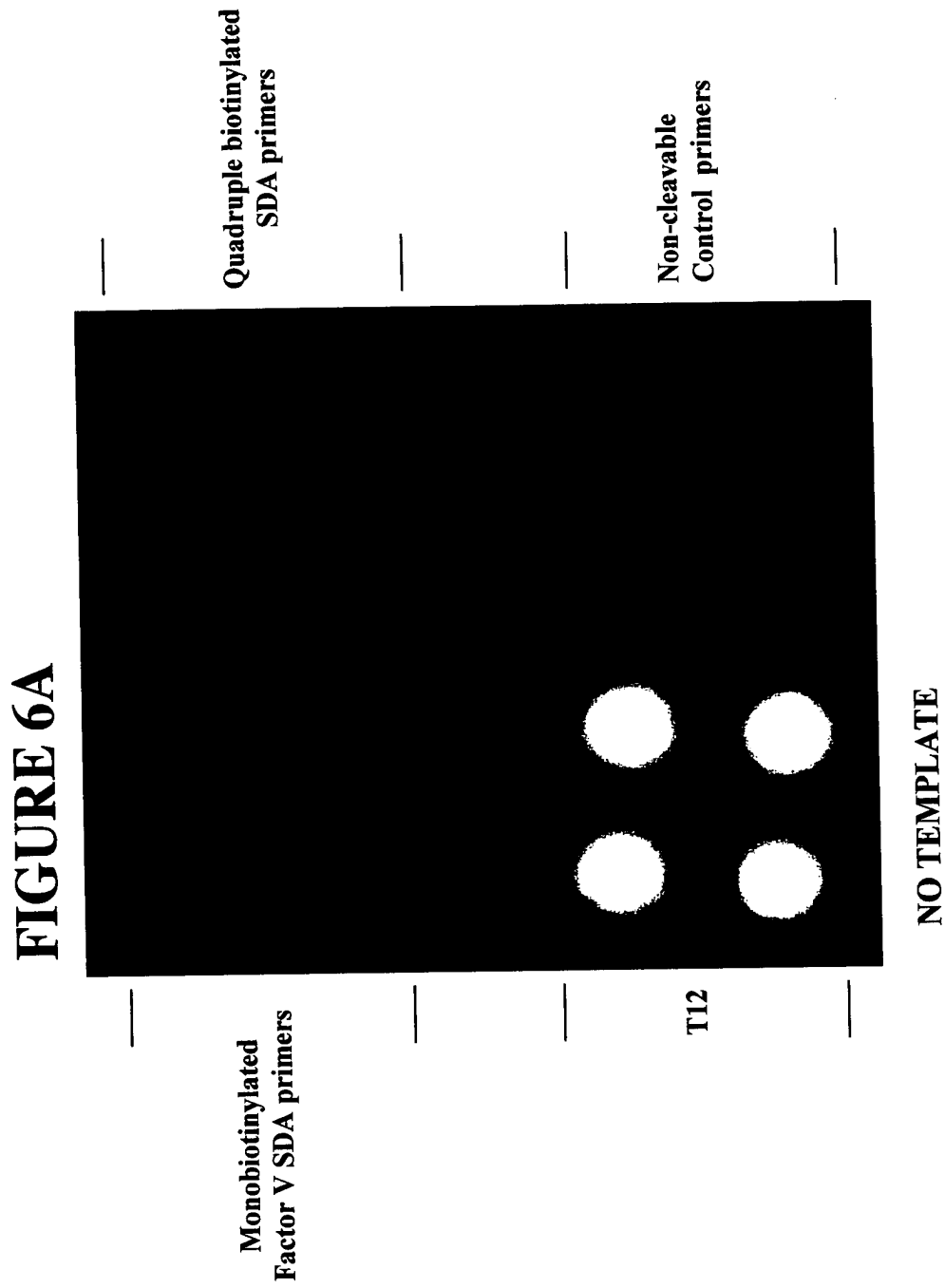


FIG. 5B

T05250" 20859860

12/34

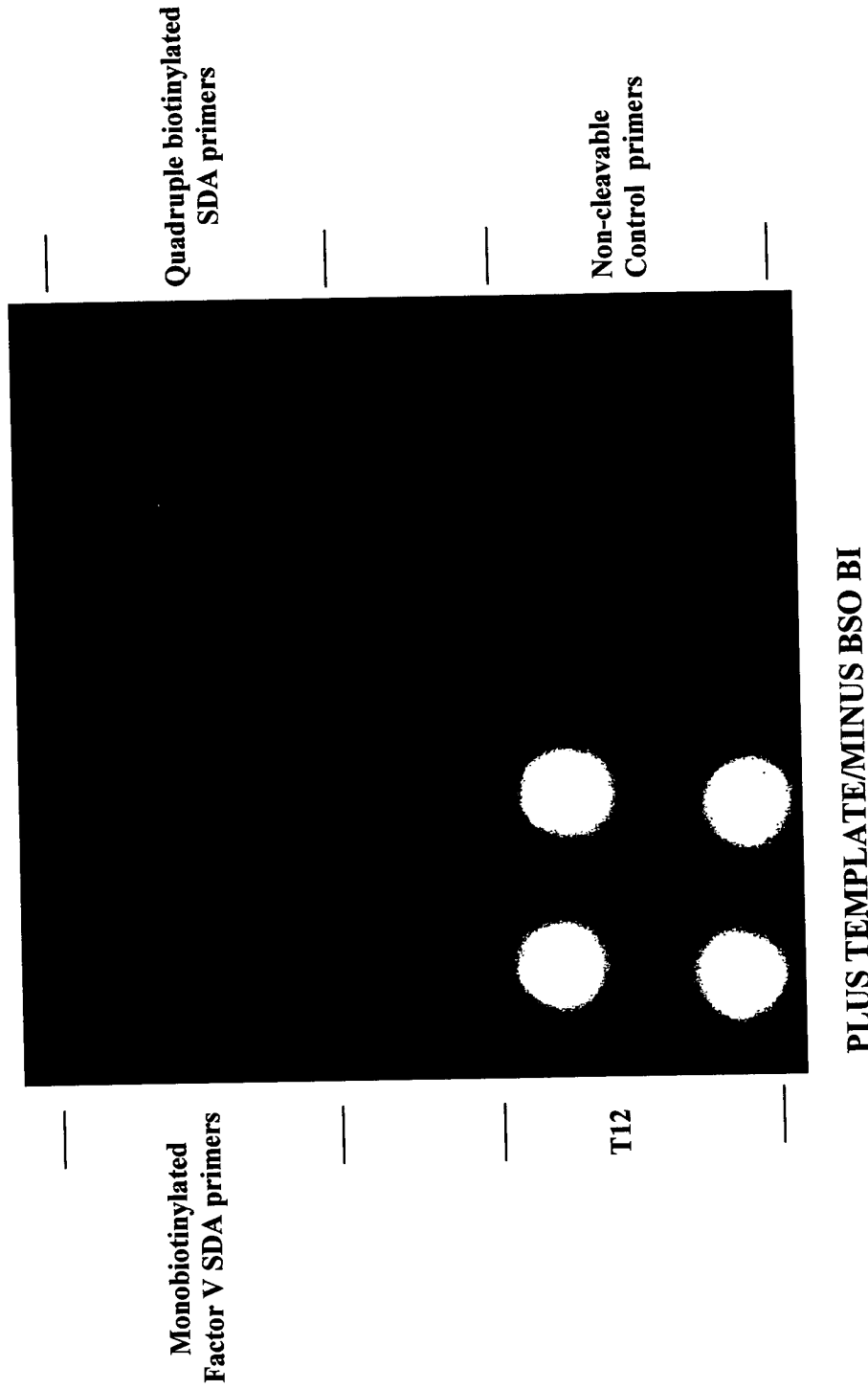


105250" / 0359860

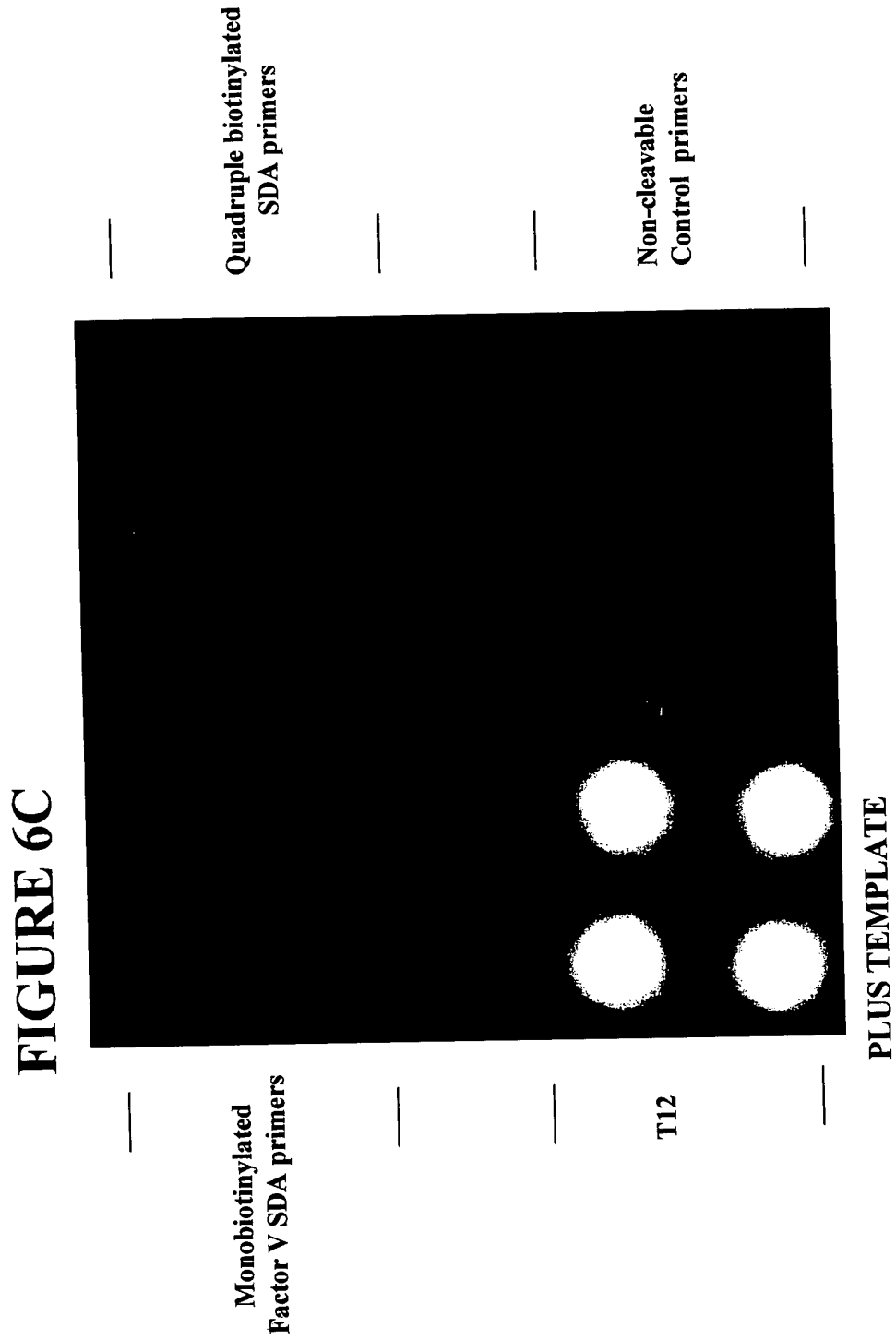
13/34

FIGURE 6B

**FIGURE 6B**



14/34



T05250" 20859860

103250" 20359360

HUMAN COAGULATION FACTOR V ANCHORED SDA IN SITU  
ON MICROCHIPS

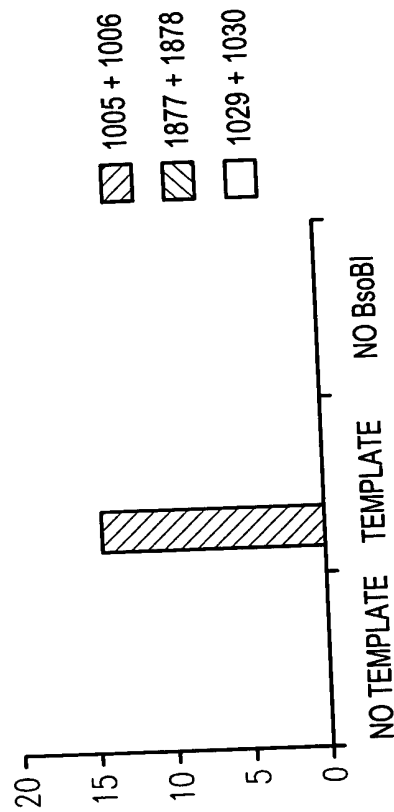
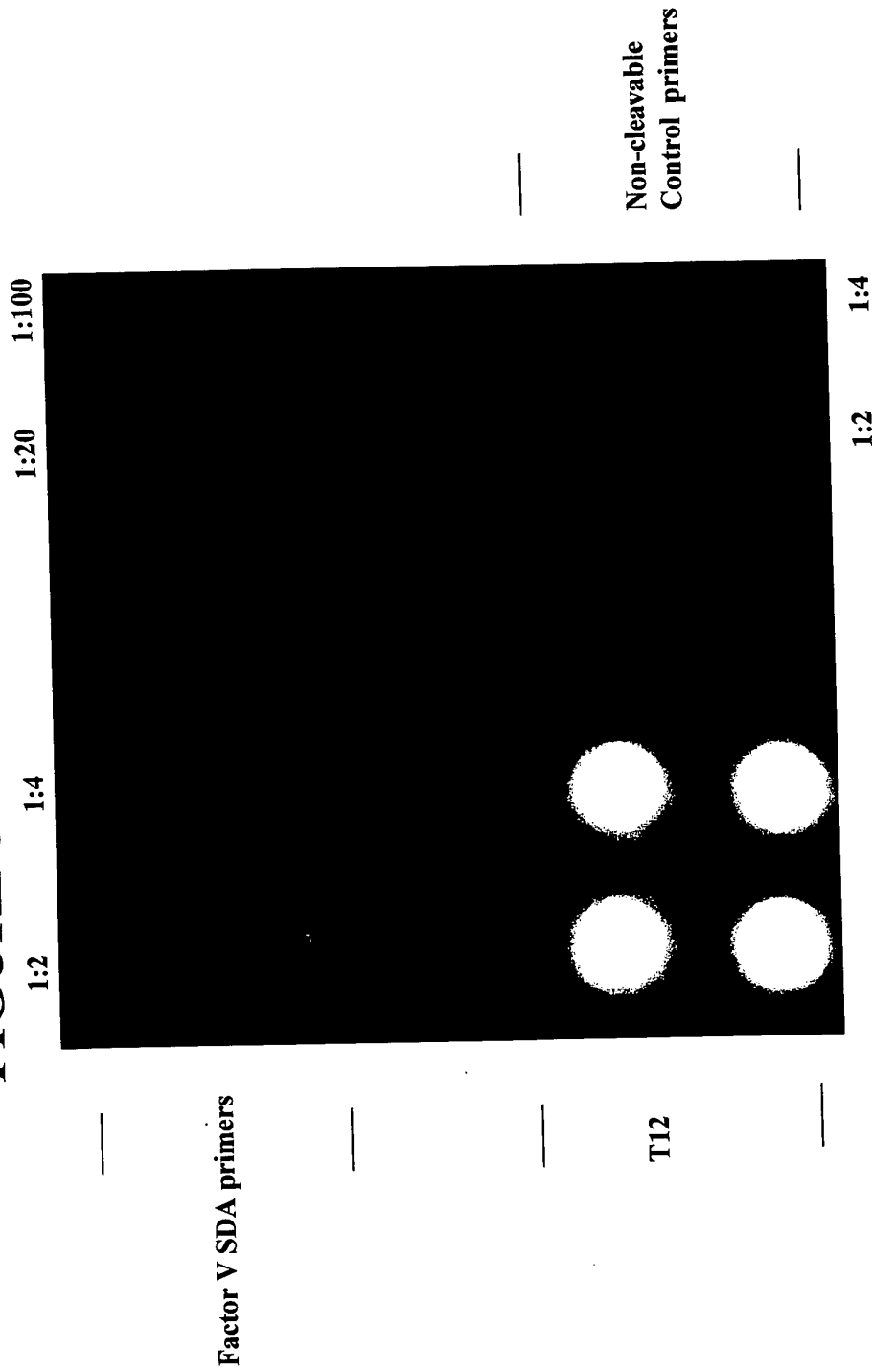


FIG. 7

16/34

105250" / 0859860

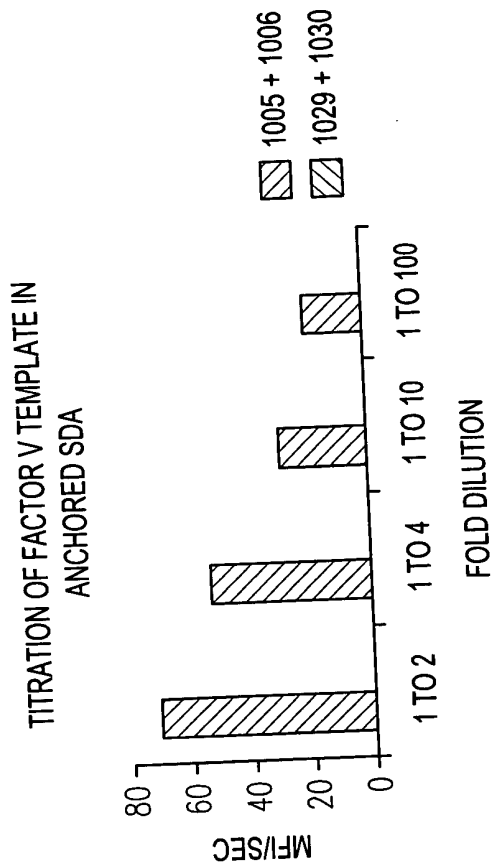
**FIGURE 8**





10550" 2059360

17/34



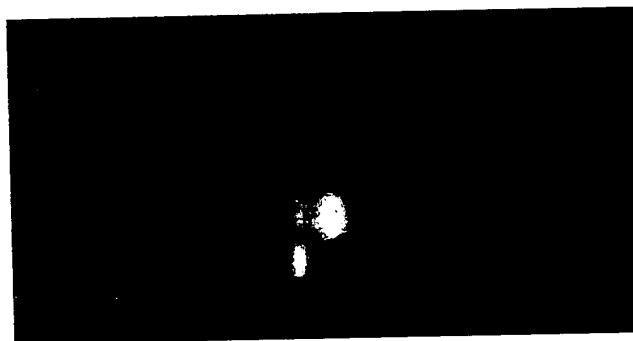
1005 + 1006 = FACTOR V SDA PRIMERS  
1029 + 1030 = NON-CLEAVABLE CONTROL PRIMERS

FIG. 9

FIGURE 10A

FIGURE 10A

1 2 3 4 5 6



Lane

1. mol wt markers
2. PCR amplification
3. NASBA 1X template
4. NASBA 1,000X diluted template
5. NASBA 1,000,000X diluted template
6. NASBA - no template

19/34

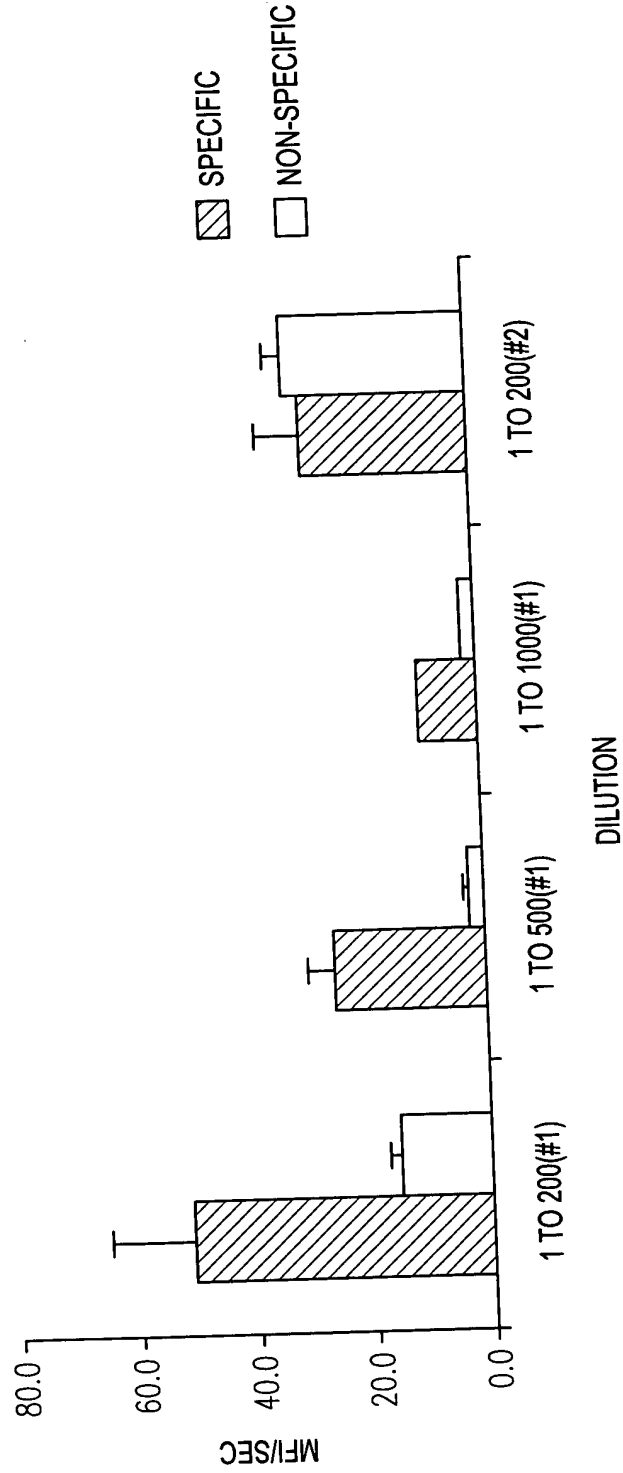


FIG. 10B

FOU250" 0859860

20/34

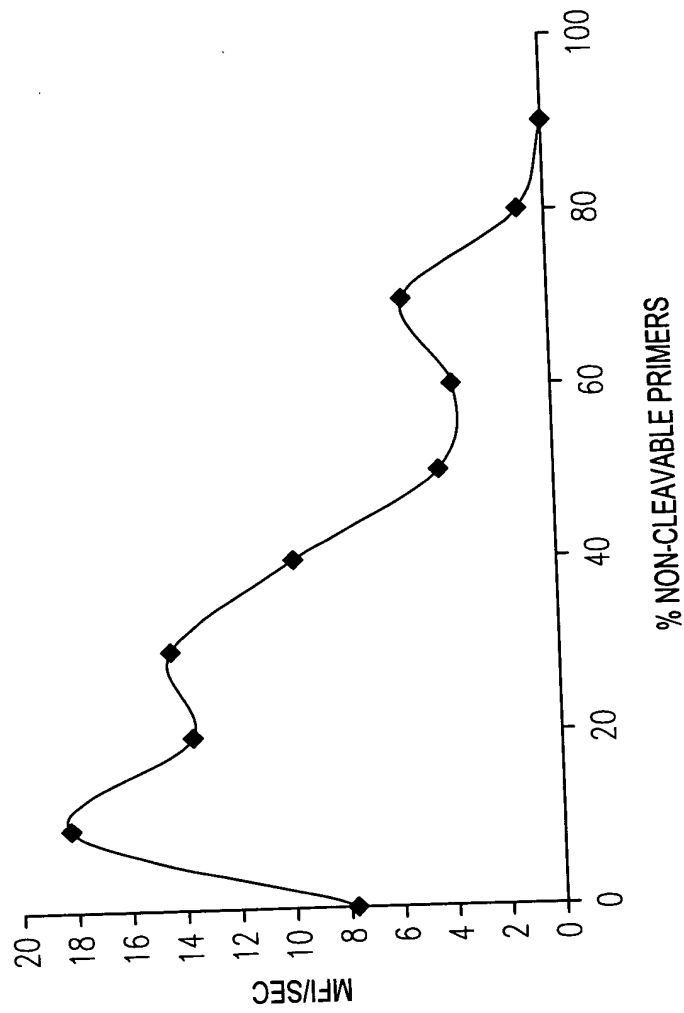


FIG. 11

FIG. 11

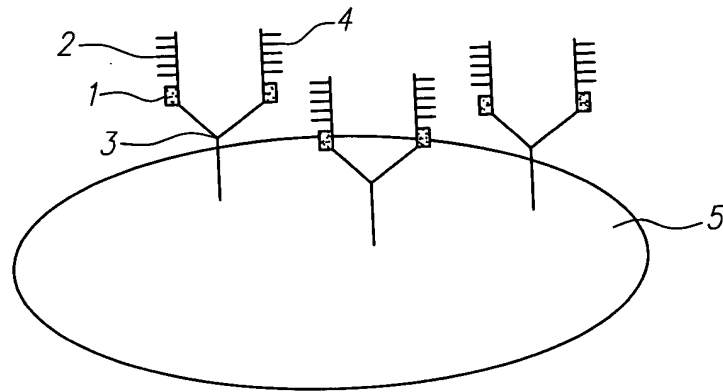
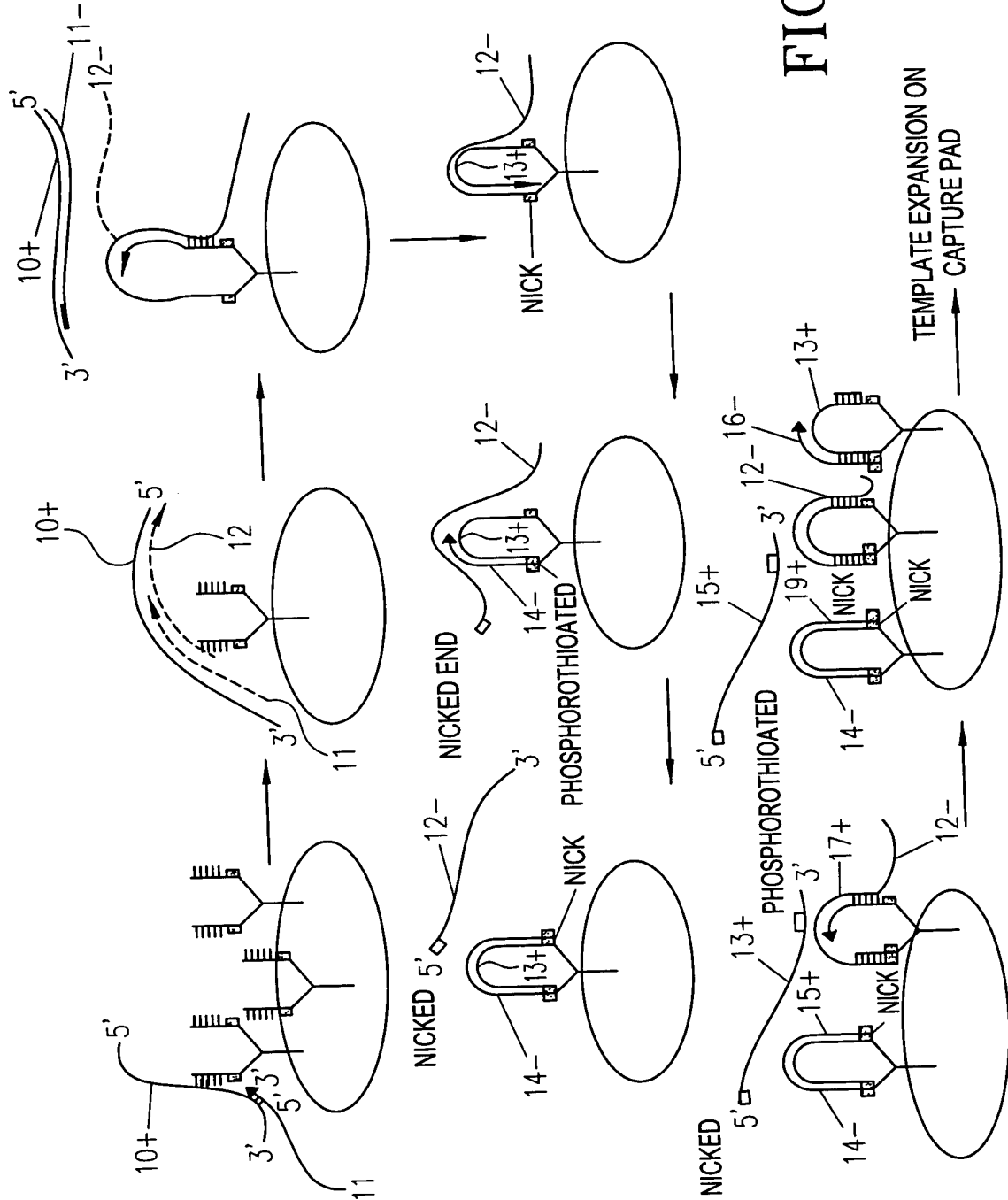


FIG. 12

09365807.052501  
T05250"/20859860

FIG. 13



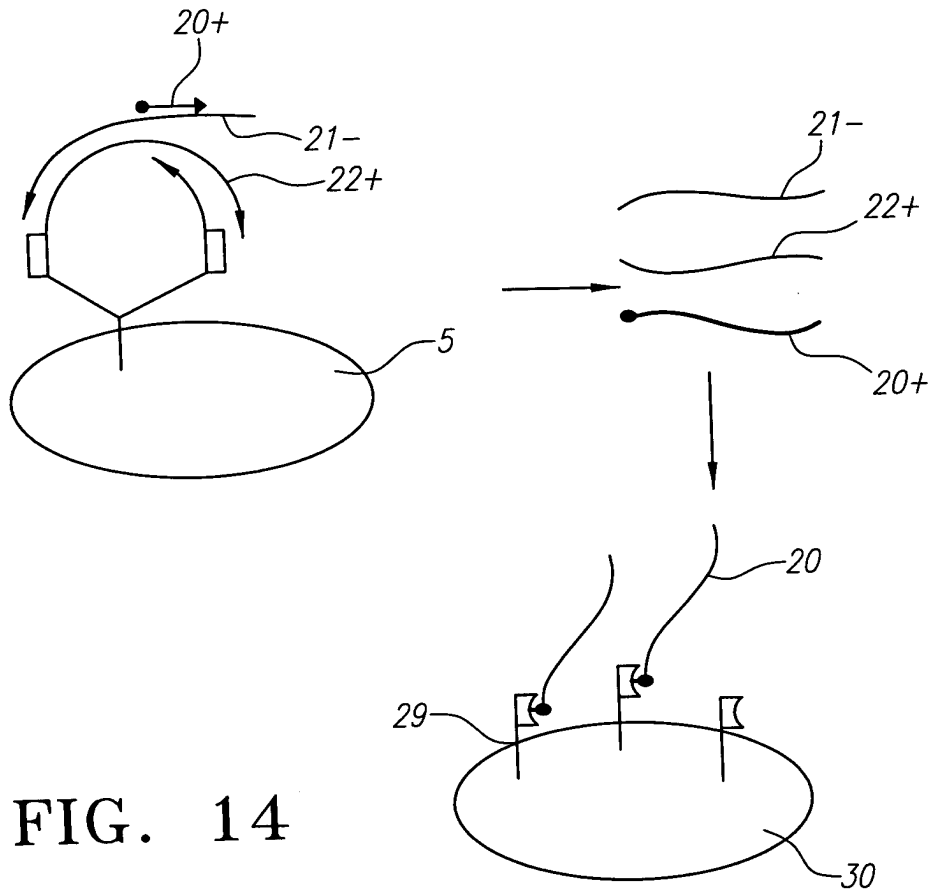


FIG. 14

0965807 05501  
T05250 20859860

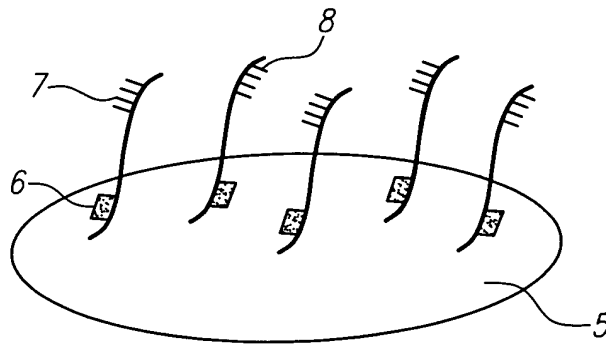


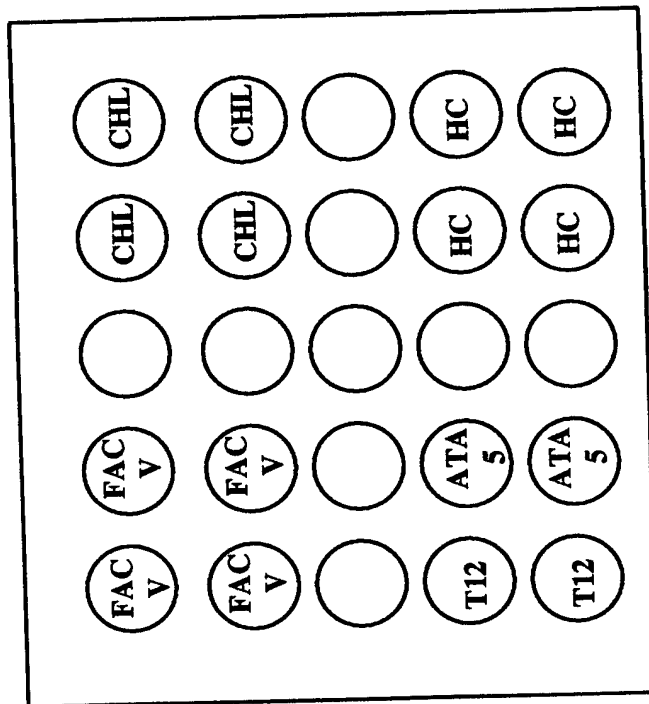
FIG. 15

09290577, 052501



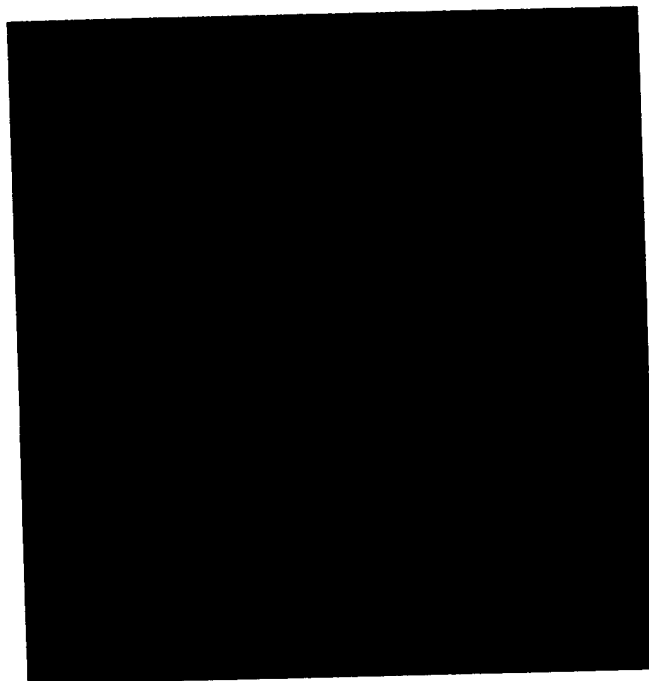
T05250" 20859860

FIGURE 16



Experimental Layout

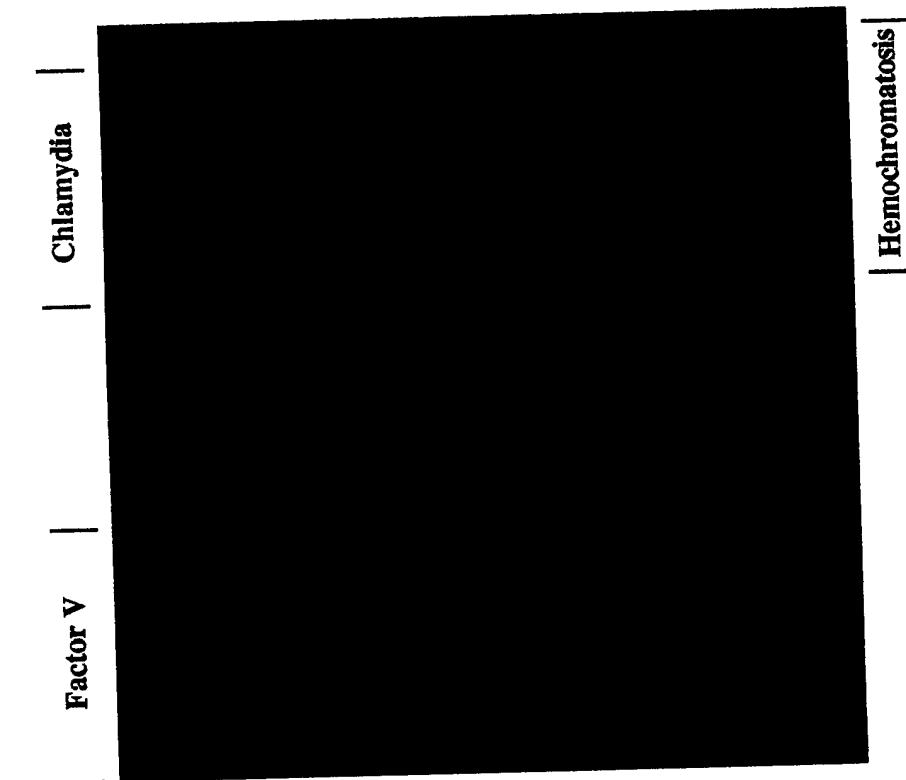
FIGURE 17



Control - No template +  
all reporter oligos

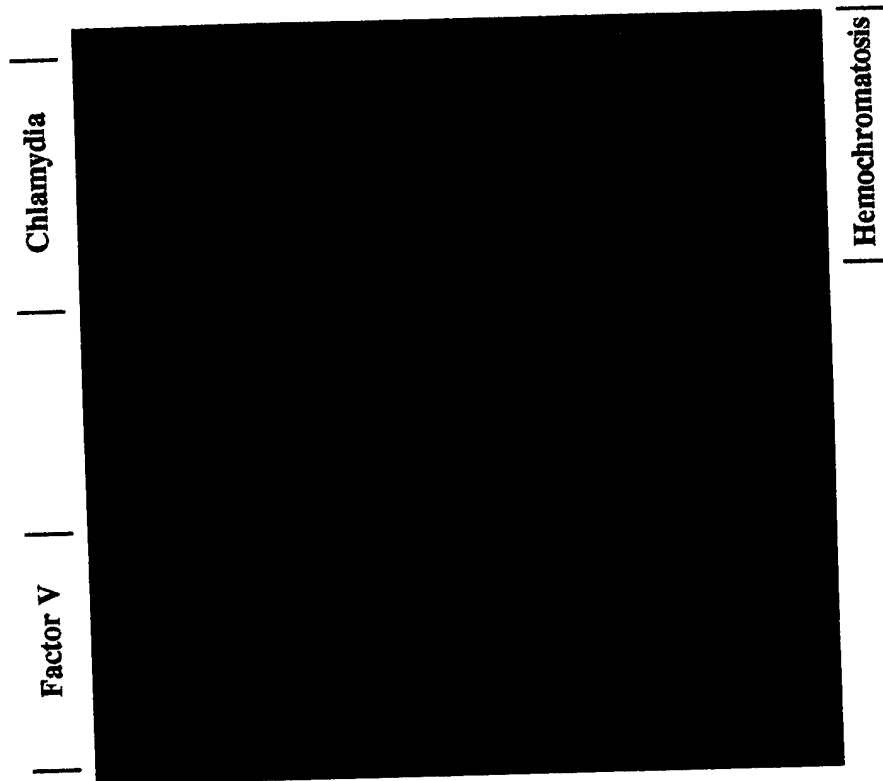
FO5250" 20859360

**FIGURE 18**



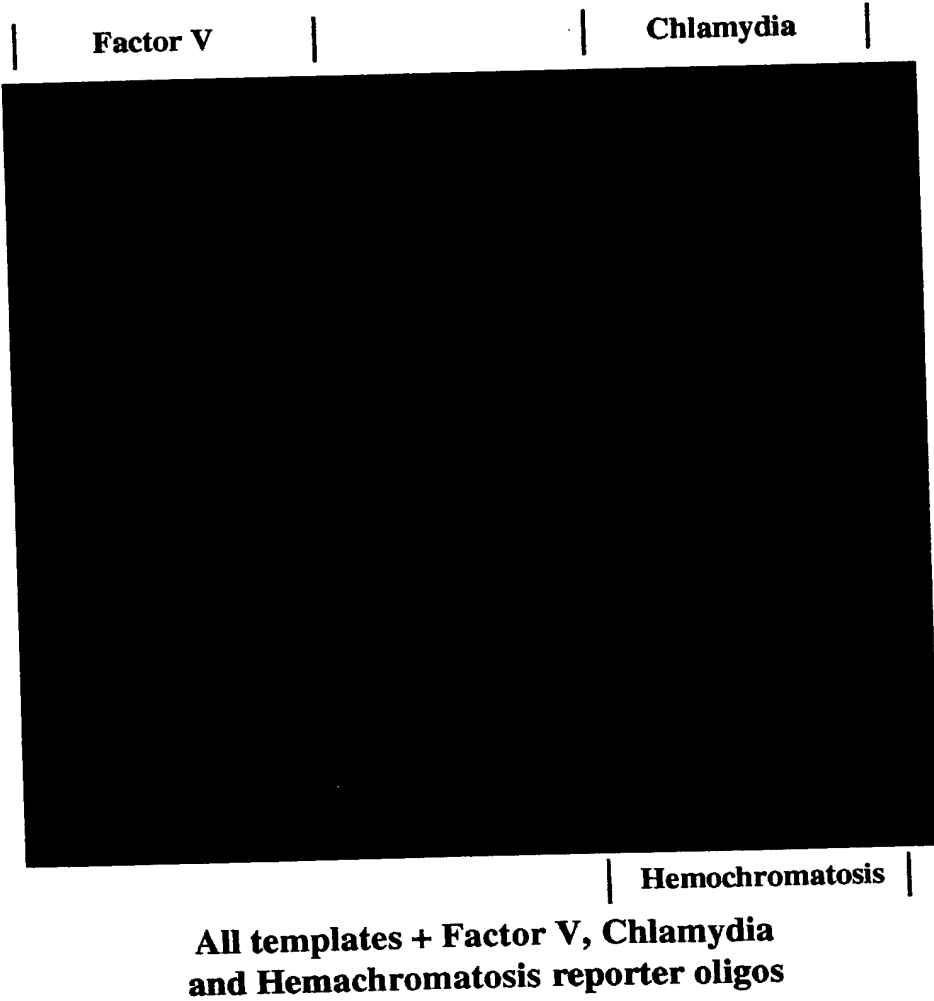
**All templates + Factor V Reporter oligo**

**FIGURE 19**



**All templates + Factor V, Chlamydia  
Reporter Oligos**

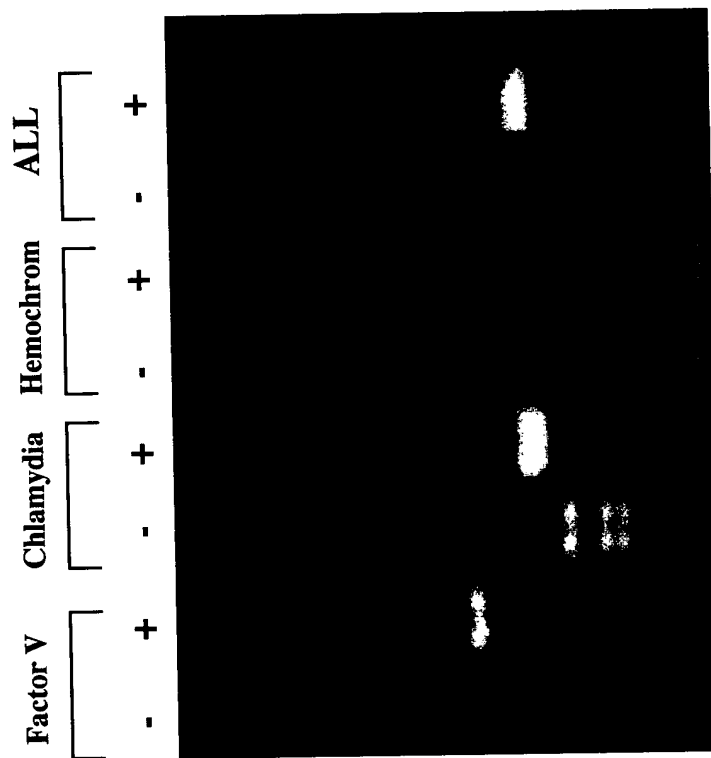
## FIGURE 20



095250" 20859860

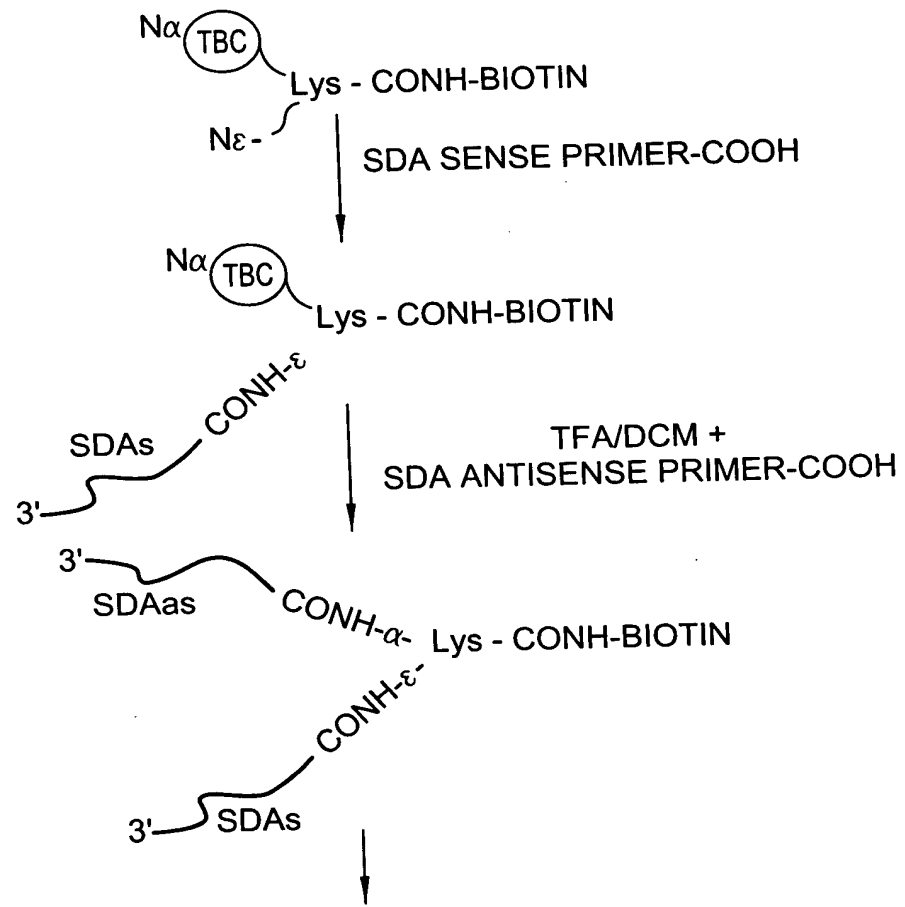
FOI250 20859360

FIGURE 21



Control Solution SDA reactions

29/34



ATTACH TO STREPTAVIDIN PERMEATION LAYER ON MICROCHIP

FIG. 22

095250-20359360

30/34

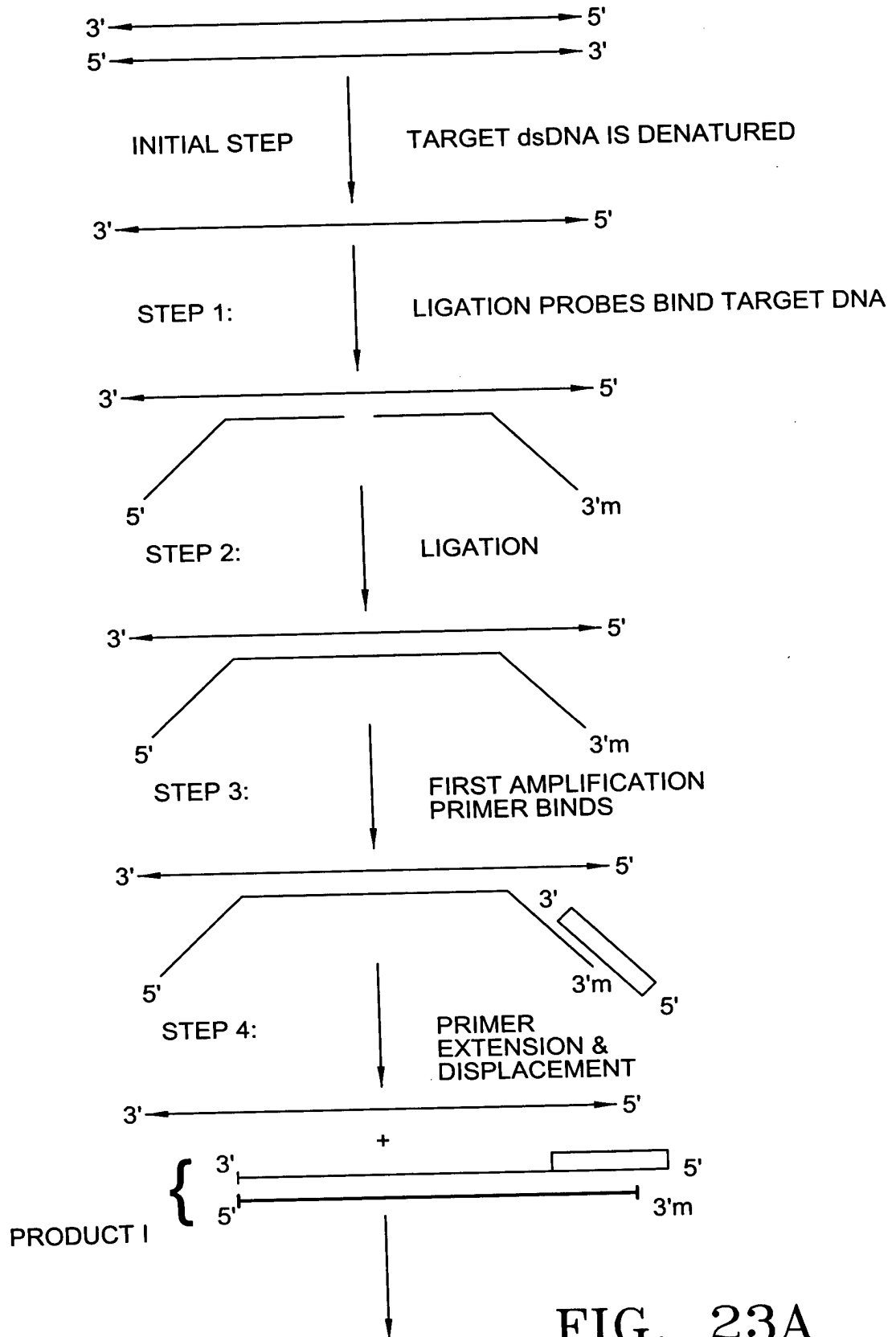


FIG. 23A

09365807-052501

31/34

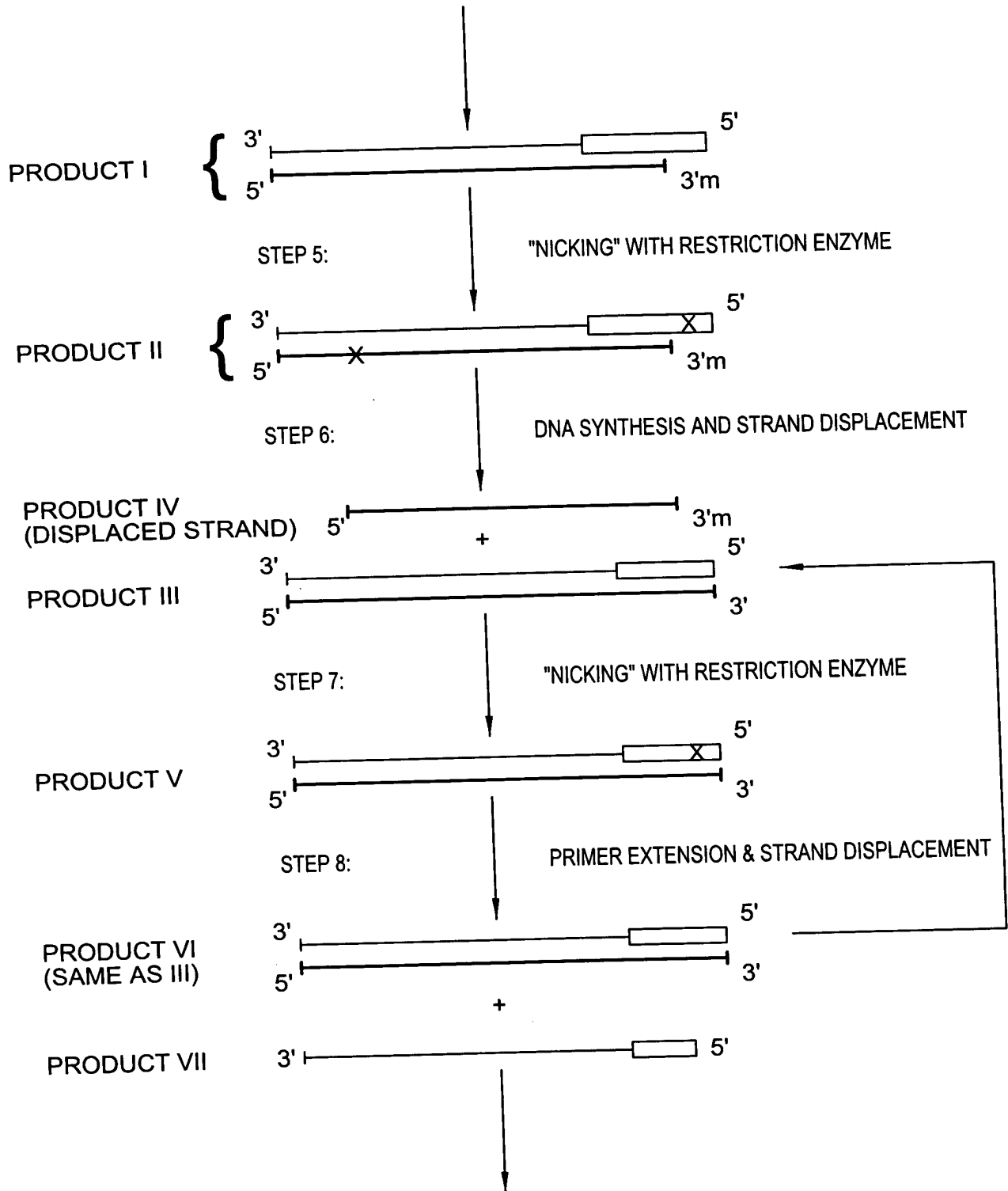
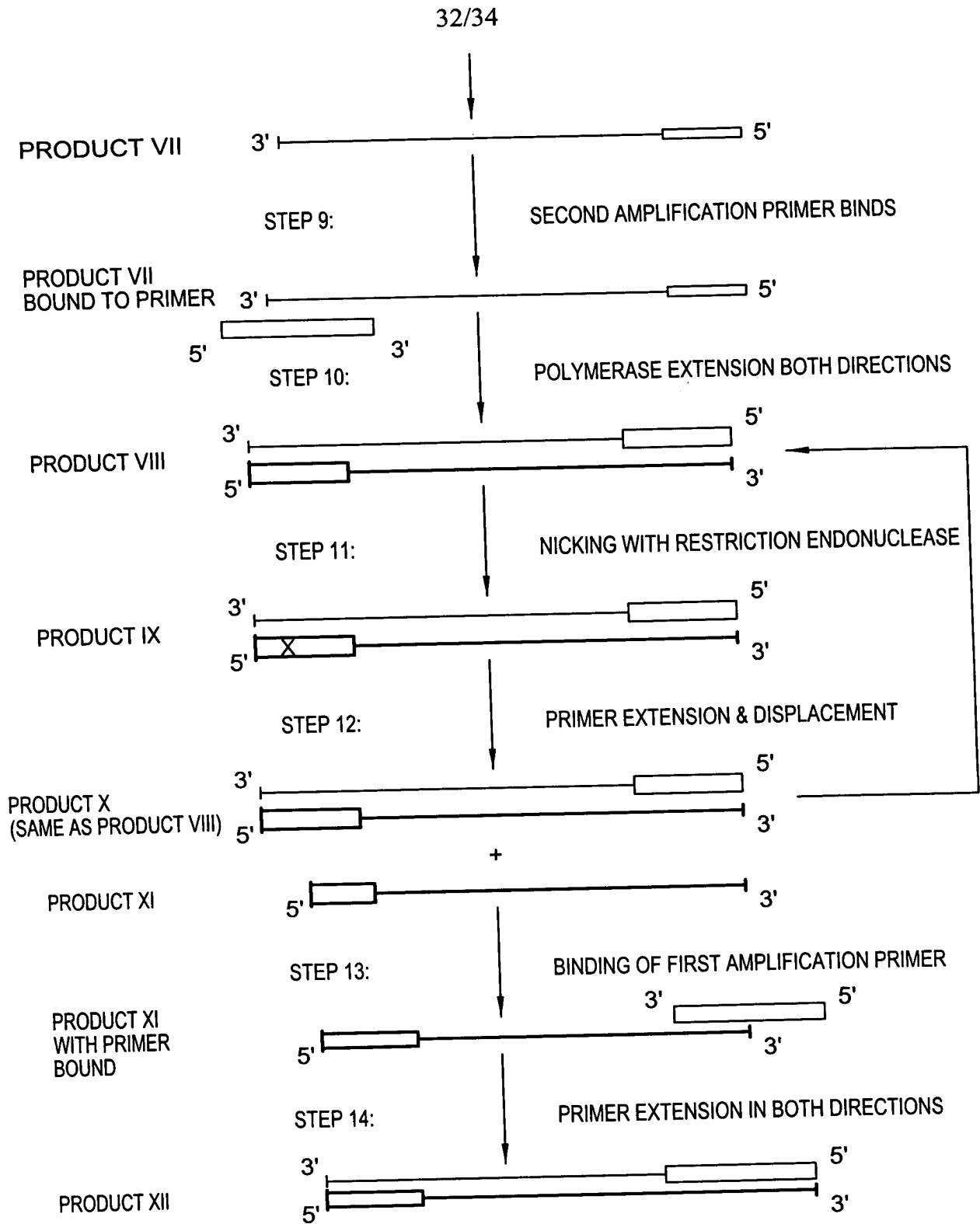


FIG. 23B



(PRODUCT XII CAN RE-ENTER PATHWAY AND BE FURTHER AMPLIFIED IN A MANNER  
SIMILAR TO PRODUCT III, FOLLOWING STEP 6)

FIG. 23C



# LIGATION-DEPENDENT DETECTION OF THE SALMONELLA spaQ GENE

## LIGATION PROBES LP1 AND LP2:

spaQ<sup>1</sup> TEMPLATE 5-nnnnncaacatgacatcattacgagcgggatagttaaattggaatgatttagtgnnnnn-3'

|||||

LP1<sup>2</sup> 3-\*aattccgcagctgggtaattgttactgtagtaatgctctgc\*-5' 3'-cctatcaattacactactaaatcacgattatcccctagagtcagtcgtggctc LP2<sup>3</sup>

ttcagacctcgcccttagc-5'

## AMPLIFICATION PRIMER SEQUENCES S1 AND S2:

LP1 3-\*aattccgcagctgggtaattgttactgtagtaatgctctgc\*-5'

|||||

S1<sup>4</sup> 5'-accgcacgaatgcattgctcgcggtaaggcgactcgacc

LP2 3'-cctatcaattacactactaaatcacgattatcccctagagtcagtcgtggctc ttcagacctcgcccttagc-5'

-----S2<sup>5</sup>-----

FIG. 23D

105250" 20859860

34/34

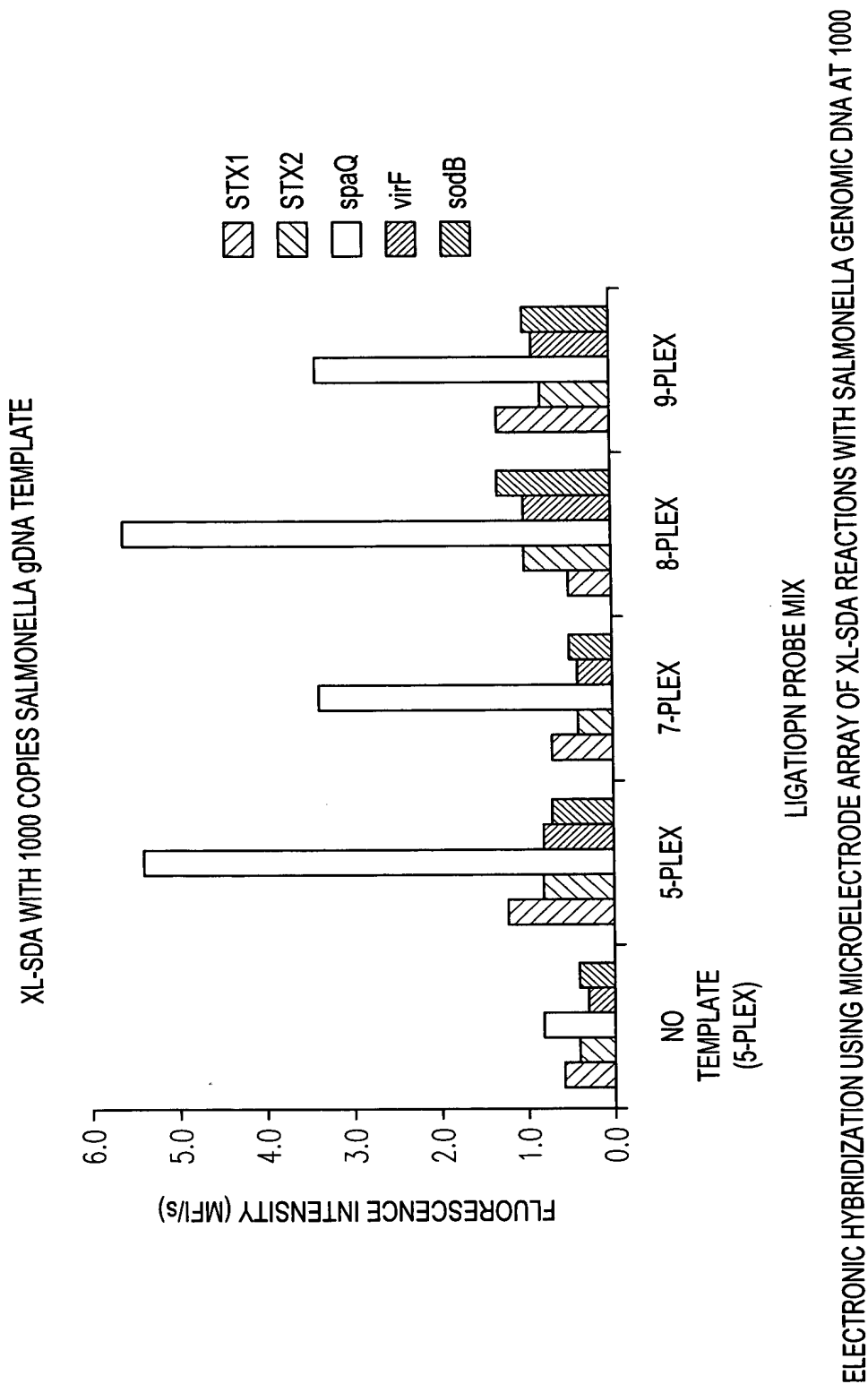


FIG. 24